Application No. 09/424,815
Paper Dated January 22, 2004
Reply to USPTO Correspondence of September 23, 2003
Attorney Docket No. 702-991768

REMARKS

Claims 28-34, 41-43, 45-47, 49, 55 and 60 are currently pending in this application. Claims 35-40, 44, 48, 50-54 and 56-59 are canceled, without prejudice, as being drawn to a nonelected invention. Claims 28-34, 41-43, 45-47, 49 and 60 have been amended. Support for the language "between 6 to 18 amino acids" can be found in Figure 1 and in claim 30. Support for the language "antimicrobial action of the compound results in inhibiting or otherwise exerting a negative effect on the infection" can be found on page 2, lines 29-31 et seq. No new matter has been added. In view of these amendments and of the following remarks, Applicants believe that all the asserted rejections are in condition for withdrawal and all the claims are in condition for allowance.

Claims 28-32, 34, 41-43, 45-47, 49, 55 and 60 stand rejected under 35 U.S.C. 112, first paragraph, for purported lack of enablement. The Examiner asserts that the specification does not give any guidance as to the structure and functional relationships for the full range of existing sequences which would maintain antimicrobial activity, i.e., there is no predictability in what sequence of 3 amino acids would possess the desired function for use in the treatment of infection. The Examiner notes, however, that the specification and claims do provide examples of peptide fragments derived from SEQ ID NO: 1 referred to in the claims as SEQ ID NO: 2-5 AND 7-9, and that the size of these fragments range from 6 to 18 amino acids in length. Accordingly, Applicants have amended claims 28, 29, 31, 32-34, 41-43, 45-47, 49 and 60 to recite that the peptide fragments derived from ubiquicidine comprise a continuous series of between 6 to 18 amino acids, thus mooting this rejection. Because claims 30, 34, and 45 depend directly or indirectly from the above-identified amended claims, rejection of these claims also is deemed overcome.

Claims 28-34, 41-43, 45-47, 49, 55 and 60 stand rejected under 35 U.S.C. 112, second paragraph, for purported indefiniteness. Accordingly, Applicants have amended claim 28 to recite "does not include" in place of "exception of the peptides," as the Examiner has suggested; claim 30 has been amended to recite the transitional phrase "consisting of;" claim 34 has been amended to recite that the original amino acid chain is extended at one or both ends thereof with one or more groups of D-alanine; claims 41 and 49 have been amended to recite that the antimicrobial action of the compound results in inhibiting or otherwise exerting a negative

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effect on the infection; claim 60 has been amended to recite that the administration of a peptide fragment derived from ubiquicidine results in preventing infection in humans or animals; claim 45 has been amended to recite caused by a microorganism and the term "parasite" has been deleted as unnecessary because the term "antimicrobial" embraces antiparasitics. Based on these claim amendments, rejection of claims 28, 30, 34, 41, 45, 49 and 60, and claims 42-43, 45, 47 and 55, which depend either directly or indirectly therefrom, is believed to be overcome.

Claims 28-33, 46 and 55 are rejected under 35 U.S.C. 102(b) for purported anticipation by Mikoshiba (JP 08176193 A). The Examiner asserts that Mikoshiba teaches a peptide identical to SEQ ID NO: 1, as recited in claims 28-33, for a continuous series of 41 amino acids, and that claim 46 recites an inherent property of the peptide taught by Mikoshiba, which is also administered with an excipient, as recited in claim 55. Claims 28-33 and 46 have been amended to recite that the peptide fragments derived from ubiquicidine comprise a continuous series of between 6 to 18 amino acids. Applicants submit that the general disclosure of the amino acid sequence of ubiquicidine by Mikoshiba, referred to generally by those skilled in the art as FAU S30, does not teach nor suggest the novel finding of the present invention that specific fragments of ubiquicidine, ranging from 6 to 18 amino acids in length, as newly identified by Applicants, have potent antimicrobial action. Applicants further submit, therefore, that the present invention as now claimed is not anticipated by Mikoshiba.

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For all the foregoing reasons, claims 28-34, 41-43, 45-47, 49, 55 and 60 are patentable over the cited prior art and in condition for allowance. Reconsideration of the rejections and allowance of pending claims 28-34, 41-43, 45-47, 49, 55 and 60 are respectfully requested.

Respectfully submitted,

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